# lesson 1: it's all connected

#### estimated time

2-3 hours

#### science GLEs

**L0.1.A.3.a.** Describe the basic needs of most plants (i.e., air, water, light, nutrients, temperature)

#### vocabulary

Living things Non-living things Organism Population Community Environment Ecosystem

#### lesson objectives

- 1. Describe the basic needs of most plants and animals.
- 2. Identify the living and non-living components of an ecosystem.
- 3. Explain why non-living components of an ecosystem are important for the living components.
- 4. Demonstrate how organism, population, community and ecosystem are connected.

#### essential questions for the lesson

- 1. How are plants and animals connected to the air, light, soil, rocks, water and other non-living things?
- 2. What's the "recipe" for an ecosystem?

#### teacher notes

Students should have read Chapter 1, "It's All Connected," on pages 2–3 in their student books prior to engaging in these activities. This lesson includes a review of the basic needs of most animals from grade 1 GLE L0.1.A.1.a.

Since students will be using the schoolyard for many activities in this lesson and throughout the *Nature Unleashed* unit, it is very important that the teacher be thoroughly familiar with the schoolyard and any safety issues or concerns. Students will begin using science notebooks in Lesson 1 and will continue using them throughout the unit. Refer to *Student Science Notebooks* section and the *National Science Teachers Association Article* in the Teacher Notes section.

#### outline of answers to objectives See following page.

#### transparency masters

**Transparency 1.1:** Organism

**Transparency 1.2:** Population

**Transparency 1.3:** Community

**Transparency 1.4:** Non-living Things

#### essential activities

**Activity 1.1:** Living or Non-living?

**Activity 1.2:** Space—It's a Basic Need, Too

**Activity 1.3:** Organism, Population, Community, Ecosystem?

**Activity 1.4:** Schoolyard Ecosystem Interactions

**Activity 1.5:** Making Connections

#### SO, What do You know?—Lesson 1 questions and answer key

#### summary

Organism—a single living thing

Population—a group of the same organisms living together

Community—different populations of organisms living together



### outline of answers to objectives—lesson 1

- 1. Describe the basic needs of most plants and most animals. (page 2)
  - a. Plants need air, water, light, nutrients, space and temperature.
  - b. Animals need air, food, water, shelter and space.
- 2. Identify the living and non-living things of an ecosystem. (page 2)
  - a. Living—plants and animals
  - b. Non-living—sun, air, rocks, soil, water, temperature and landforms (hills, valleys, mountains) are examples of non-living things.
- 3. Explain why non-living things are important for the living things. (page 2)
  - a. Living things cannot live without the non-living things.
  - b. Living things interact with the non-living things in their environment.
- 4. Demonstrate how organism, population, community and ecosystem are connected. (pages 2, 3)
  - a. An organism is a single living thing that can grow and reproduce.
  - b. Two or more of the same organism living in the same area at the same time forms a population.
  - c. Multiple populations of organisms living together in the same place at the same time forms a community.
  - d. Populations of plants and animals living together in communities interact with each other, or act on each other, and with the non-living things in their environment (Environment is the immediate area around a plant or animal). Living and non-living things that interact in an environment form an ecosystem.

## activity 1.1: living or non-living?

estimated time 30-40 minutes

#### objectives

Students will be able to

- 1. Describe the basic needs of most plants and animals.
- 2. Identify living and non-living components in the schoolyard.

#### teacher preparation

Student should have read Chapter 1, "It's All Connected," on pages 2–3 in their student books prior to engaging in these activities.

This will be the first time students use their science notebooks. Provide time at the beginning of the activity to explain why they will use science notebooks and to guide them through the process of completing the headings for each entry. *Student Science Notebooks* in the Teacher Notes section provides background information. How outside air temperature readings are taken depends upon the number of thermometers available and the thermometer-reading skill levels of students. It is recommended that enough thermometers be available to allow one for every three or four students. This keeps everyone engaged in the process. If fewer thermometers are available, have students take turns taking the outside air temperature and sharing the reading with the entire class. All students should record outside air temperature in their science notebooks. If students are unfamiliar with the process, provide several short outdoor sessions to explain and demonstrate the process to students and to allow them ample time to practice prior to beginning *Activity 1.1*. The taking of outside air temperature should not consume more than a few minutes of class time.

The first set of questions in the Procedure below serve as a review of GLEs from first grade regarding basic needs of animals. Have students prepared for an outdoor field investigation. (See *Field Investigations* in the Teacher Notes section.)

Take a preparatory walk around the schoolyard and note where you find examples of living organisms as well as examples of non-living things (Ex: rocks; water; sunlight; soil\*; air temperature; hills; sidewalks; buildings; playground equipment; fences, etc.). During the course of the activity, if students are unsure and/or unable to find examples, refer to your notes and provide subtle prompts for students to discover examples.

Students may have difficulty recognizing that the phrase "living things" refers to the living components of an ecosystem. Living things are things that are able to grow and reproduce (create more of themselves). Living things that have died and are decaying are considered to be dead and may no longer be considered living because they cannot grow and reproduce. However, dead and decaying things may still contain energy stored in their cells that may possibly provide food for things that are still living.

#### materials

Science notebooks Pencils Thermometers Field guides (optional)

#### procedure

1. Have student bring their science notebooks, pencils, and thermometers into the schoolyard or area of choice. Explain to students why they will use science notebooks for this unit and guide them through the steps of completing the headings including the taking and recording of outside air temperature. (See *Recording Outside Temperature with Students* in the Teacher Notes section)

Date—should include the month, day and year

Time of Day—should include the actual time

Location—brief record of where the activity will take place (in schoolyard; near playground equipment; in butterfly garden; outdoor classroom, etc.)

Outside Air Temperature—should be recorded in Celsius

Weather—brief description of current weather conditions (windy and cold; hot and sunny; rainy; snowy; snow flurries; cold and sunny, etc.)

- 2. In their science notebook, have students note that there are two sections, one on top labeled "Living Things" and the other on the bottom labeled "Non-living Things." Explain that the other columns on the page will be used with another activity.
  - Q. How do we know something is a living thing?
  - A. Answers will vary: Living things grow and reproduce (make more of themselves); they need to eat and drink in order to survive; they breath; they can die; they need things to survive; they have basic needs, etc.
- 3. Instruct students to observe their schoolyard carefully by standing in one place and turning to look all around or by moving slowly within a designated area.
- 4. Instruct students to observe the living things they see and list them in their science notebook in the "Living Things" section.
- 5. Instruct students to observe the non-living things they see and list them in their science notebook in the "Non-living Things" section.
- 6. Allow students to list what they observe generically (bird, insect, plant, etc.) unless they know the specific, common names (robin, ant, dandelion, etc.).
- 7. Have students review their lists of living and non-living things. [If students have placed "dead" leaves, flowers, insects, etc. in the "Non-living" column. Leaves, flowers, insects, etc. that are dead are no longer living and no longer able to grow and reproduce. Therefore, they belong in the "Non-living Things" column. Dead and decaying animals and plants may still pass along energy left in their cells to other plants and animals that eat them. Rocks are non-living because they NEVER had basic needs such as air, water, light, nutrients, space, temperature or shelter. Plants and animals need those basic things to survive. That's why plants and animals are considered living things—whether they have died or not.]
  - Q. After looking over your science notebook lists (and/or understanding and revisiting lists to make the distinction explained above), how many things would you switch from one section to the other?
- 8. Have students circle the thing(s) they wish to change and draw an arrow from the circled thing(s) to the correct section. Ask students to explain why they are making changes. Follow-up/review distinctions as needed. [Explain that in addition to having basic needs, plants and animals grow and reproduce (create more of themselves). Non-living things do not have basic needs nor do they grow or reproduce. Discuss as needed.]

**Wrap-up/formative assessment** See *Wrap-Up/Formative Assessments* in the Teacher Notes section of the introductory material to choose a strategy that meets student needs.

## activity 1.2 : space—it's a basic need, too

#### estimated time 20-30 minutes

#### objectives

Students will be able to

- 1. Explain why all living things need space.
- 2. Predict in writing what might happen to plants growing in severely crowded environments.

#### teacher preparation

This activity may be done indoors or outdoors but does require enough open space for students to stand together comfortably. Prepare a flat, open area by placing an X with chalk or place some flat item on the ground (a rubber baseball base or some other flat object that will not blow away or be moved easily by students standing over it) where students will be asked to gather. Although this activity only addresses the need for space, it is an effective way to illustrate the importance of all basic needs of plants and animals. **Be aware that this activity requires students to stand very close to each other.** 

#### materials

Science notebooks
Pencils
Chalk (or flat object)
Writing Prompt Scoring Guide (Appendix C)

#### procedure

- 1. Stand facing the X and have students gather randomly in front of you and scattered around the X. There is no need for students to gather in any formal arrangement, and at this point, they do not even need to be aware of the X.
- 2. Point out the chalk X/flat object on the ground/floor in the middle of the students and explain to them that each time you clap your hands, they will take one step towards the spot/object. Do not tell students why they are doing this. The effectiveness of this activity depends on students slowly becoming aware of their shrinking space.
- 3. Try one practice clap. Repeat instructions, if necessary.
- 4. Begin the activity and continue to clap your hands very slowly allowing students time to take each step, to stand for a moment, and to become aware of their new proximity to their classmates.
- 5. Continue until students are sufficiently "starved for space:"
  - Q. How comfortable are you right now?
  - A. Answers will vary: uncomfortable; squashed; etc.
  - Q. What would your life be like if you had to live it this way?
  - A. Answers will vary: unhappy; angry; uncomfortable; unhealthy from being too close to others; unable to move around enough to get food (hungry); etc.
  - Q. What do you need more than anything right now "to survive?"
  - A. SPACE! Explain that all living things such as animals do need air, food, water, and shelter, but they also always need the right amount of space to survive. When people are crowded together, they are uncomfortable and spread diseases more easily. Animals that live crowded together often have difficulty finding enough food and shelter, sometimes fight for space, and catch diseases more easily from each other.
- 6. Allow students to move away from each other and give themselves some space.
  - Q. Now that you have been crowded humans, what might have happened if you had been a group of plants crowded that closely together?
  - A. Crowded that closely together, the plants might not have been able to get enough light, water or nutrients to survive.

#### Q. As a plant in that crowd, what would you have needed to help you survive?

A. Space! Plants need air, light, nutrients, water and temperature, but plants, like all living things, also need the right amount of space in order to survive.

#### wrap-up/formative assessment

Explain to students that they will put themselves in the place of a plant that is growing in very crowded conditions (in the middle of many, many other plants) and predict what might happen to that plant.

Instruct students to use their science notebook to write three paragraphs about "A Day in the Life of a Crowded Plant." Students may approach the topic generically as a flower, tree, bush, etc. or specifically as a rose bush, an oak tree, a daisy, etc. Encourage students to keep in mind the basic needs of all living things, especially plants. Give students a copy of *Writing Prompt Scoring Guide*.

#### evaluation

See Writing Prompt Scoring Guide in Appendix C of this Guide.

### activity 1.3: organism, population, community, ecosystem?

#### **estimated time** 30–40 minutes

#### objectives

Students will be able to

- 1. Differentiate between organisms and populations.
- 2. Explain relationships among ecosystem components.
- 3. Compare general ecosystem components to their schoolyard/surrounding school area.

#### teacher preparation

The first part of this activity asks students to reference their list of living and non-living things from the first page of their science notebooks and, after spending a short time observing the outdoor area, instructs them to add any new ones to their initial list. Students will eventually complete a *Big Chart: Schoolyard Ecosystem* (provided in the center of student science notebooks) that will include this information.

This is an outdoor activity. Take a brief preparatory walk around the schoolyard and note where you find examples of living organisms and populations of organisms. During the course of the activity, if students are unsure and/or unable to find examples, refer to your notes and provide subtle prompts for students to discover examples.

Black and white overlay templates (Transparency Masters) are provided with this activity as an additional visual tool to reinforce the relationships of ecosystem components (organism, population, community + non-living things = ecosystem). Copy templates onto clear overhead acetate sheets and layer them using an overhead projector, a Smart Board or simply hold them up against a white background.

#### materials

Science notebooks

Pencils

**Thermometers** 

Overlays (4 Transparency Master templates are provided.)

#### procedure

- 1. Have students complete their science notebook headings and take and record outside air temperature.
- 2. Instruct students to move slowly through their schoolyard again and to observe the living things they see and add any that are not already on their list in their science notebooks in the "Living Things" section. This time, have students use the "Number" column to record how many of each different living thing they see.
- 3. Allow students to list what they observe generically (Ex: bird; insect; plant; etc.) unless they know the specific, common names (Ex: robin; ants; dandelion; etc.).
- 4. Instruct students to observe the non-living things they see and list any not already on their list in their science notebooks in the "Non-living Things" section (soil, walls, building, sidewalks, cars; air; sunlight; water as rain, pond, puddle; temperature; playground equipment; fences, etc.).
  - Q. Looking at the first living thing on your list, how many have listed an organism? How many have listed a population?
  - A. Observe the show of hands for each question.
- 5. Review definition of organism: a single living thing capable of growing and reproducing.
- 6. Review definition of population: a group of the same organisms living together in the same place and at the same time.
  - Q. How do you know if your first entry is an organism or a population?
  - A. Example 1: One ant = an organism

    More than one of the same kind of ant = probably a population of ants in the area

Example 2: One sowbug/roly-poly bug = an organism More than one sowbug/roly-poly bug = a population

Example 3: One bird = organism

More than one of the same kind of bird = population

- 7. For each entry, instruct students to make a check mark in the "Organism" column if it is a single living thing or in the "Population" column if there is more than one of the same living thing.
- 8. Q. How many have checked off one plant as an organism?
  - A. Answers will vary.
  - Q. How do we know if this plant is a living or a non-living thing and that it is an organism?

A. Plants are living things that need air, nutrients, water, light, temperature and space to survive, and it would be an organism because there is only one of it.

- 9. Review definition of organism (a single living thing capable of growing and reproducing).
- 10. Review definition of population (a group of the same organisms living together in the same place and at the same time).
  - Q. Are your plant entries examples of organisms or populations?
  - A. Example 1: One tree/plant = an organism
    - More than one of the same tree/plant = probably a population of trees/plants in the area
    - Example 2: One flower/more than one flower
    - Example 3: One dandelion/more than one dandelion
- 11. For each plant entry, instruct students to make a check mark in the "Organism" column if it is a single living thing or in the "Population" column if there is more than one of the same living thing.
  - Q. [If the two or more birds, ants, bees, flowers, trees, etc. (or other animals and plants) observed are different species (look very different), state to students] How do you know if these birds, ants, bees, flowers, trees, etc. are part of the same population?
- 12. Review definition of population and open it for discussion. Field guides may be helpful.
  - Q. Why do you think these organisms (ants, sowbugs, birds, trees, plants, dandelions, etc.) are living and growing here in this schoolyard?
  - A. The basic needs of all living things (plants and animals combined) are air, food, water, shelter, space, nutrients, light and temperature. These organisms find what they need to live, grow, reproduce and survive here.
  - Q. I wonder whether or not these plants and animals could be part of a community?
  - A. A community is a group of different populations of organisms living in the same place and at the same time.
  - Q. I wonder if there is such a thing as a schoolyard community. How would we know if we had one?
  - A. All the organisms and populations checked off under "LivingThings" in their science notebooks or on their charts are living together and at the same time here in their schoolyard/area surrounding their school. Therefore, these plants and animals are part of the schoolyard community.
- 13. Instruct students to look at their "Non-living Things" section.
  - Q. How do you know these entries (sidewalk/water/sunlight/fence/rocks/etc.) are non-living things?
  - A. Living things need air, water, nutrients, food, shelter, light and space to survive, and they grow and reproduce. Non-livings things have no basic needs. Non-living things do not need air, food, water, shelter and space. Non-living things do not grow or reproduce. Non-living things have never been living and do not "survive."
  - Q. I wonder whether or not these plant and animal populations that are part of our schoolyard community could be part of an ecosystem.
  - A. Open it for discussion. All the populations of plant and animal organisms living together in communities and interacting with other living things and the non-living things in their environment (the immediate area around a plant or animal) form an ecosystem.
  - Q. I wonder if there is such a thing as a schoolyard ecosystem. How would we know if we had one?
  - A. The populations of organisms in this schoolyard community are interacting with each other and with the things listed under the "Non-living Things" section. Therefore, technically, they form a schoolyard ecosystem.

- 14. Have students vote on a name for their specific schoolyard ecosystem and enter that name at the top of their charts.
- 15. Display Overlay 1, *Transparency 1.1: Organism*, and discuss.
- 16. Place Overlay 2, *Transparency 1.2: Population*, over Overlay 1 (Organism) and discuss.
- 17. Place Overlay 3, *Transparency 1.3: Community*, over Overlays 1 and 2 and discuss.
- 18. Place Overlay 4, *Transparency 1.4: Non-living Things*, over Overlays 1–3 and discuss.

**Wrap-up/formative assessment** See *Wrap-Up/Formative Assessments* in the Teacher Notes section of the introductory material to choose a strategy that meets student needs.

#### extension activities

**Extension Activity 1:** Have students work in small groups. Each group should select or be assigned a section of the schoolyard to study. Sections should be large enough for each group of students to move about and observe it comfortably. Each group will identify the living and non-living components, as well as organisms, populations, etc. they observe. Groups should decide how they will gather and organize their data which should be recorded in their science notebooks. Have groups share their findings with the class and explain how and why they chose their method of organizing their data (tables, Venn diagrams or other graphic organizers).

When comparing student data, students should organize the following data in their science notebooks:

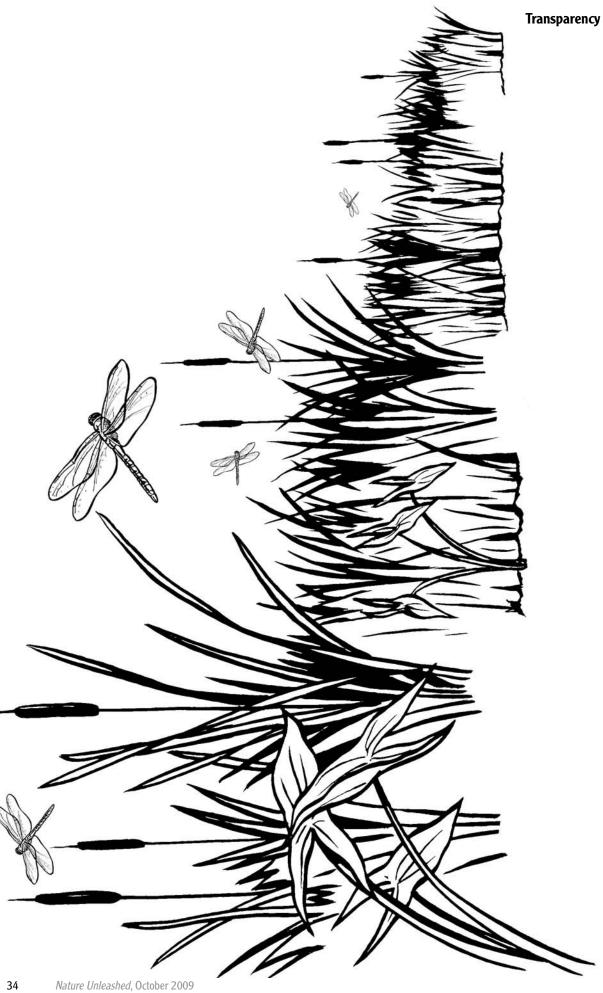
Components found in all sections	Explain	Components found in only one section	Explain	Similarities among sections	Explain

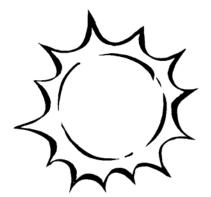
**Extension Activity 2:** Students will work in groups to decide what data they wish to collect in a specific location in their schoolyard over the course of a week. Students will use their science notebooks to collect and record date of their choice at the same location at four different times of the day. Data collection should occur at the same times throughout the week. Students will compare and contrast the results and draw conclusions as to why there were any similarities and/or differences for the different times of the day as well as for the different days. Students will organize their data and present it to the class. Science notebook headings as well as temperature readings should be part of their data collection procedure.















# activity 1.4: schoolyard ecosystem interactions

#### **estimated time** 30–40 minutes

#### objective

Students will be able to

1. Illustrate interactions among their schoolyard community of populations of living organisms with each other and with non-living things that form their schoolyard ecosystem.

#### teacher preparation

Take a preparatory walk around the schoolyard and note where you find examples of living organisms interacting with other organisms and with non-living things. During the course of this activity, if students are unsure and/or unable to find examples, refer to your notes and provide subtle prompts for students to discover examples.

#### materials

Science notebooks Two different colored pencils, pens or crayons, etc.

Pencils Binoculars (optional)

**Thermometers** 

#### procedure

- 1. Have students complete their science notebook headings and take and record outside air temperature.
- 2. Explain to students that they will be observing their schoolyard ecosystem today to observe and record how living things are interacting with other living things and with non-living things.
- 3. Instruct students to observe their schoolyard carefully as they have been doing in *Activities 1.1, 1.2* and *1.3*, standing in one place and turning to look all around or moving slowly within the designated area.
  - Q. How are living things (organisms and populations of organisms) interacting with other living things out here today?
  - A. Answers will vary. Birds are eating insects. Insects are eating other insects. Birds are eating seeds. Insects are eating nectar, grass, etc. Insects are crawling through the grass, sitting or resting on a flower, tree, bush, etc. Birds are eating/resting on flowers, trees, bushes, etc.
  - Q. How are living things (organisms and populations of organisms) interacting with non-living things out here today?
  - A. Answers will vary. Birds are landing/resting on a fence, window sill, sidewalk, etc. Insects are crawling under the playground equipment, on the fence or sidewalk, through the soil, etc.
- 4. Instruct students to open their science notebooks to the page containing their living and non-living lists and to add any new living things they observe to their "Living Things" sections and add any new non-living things they observe to their "Non-living Things" section.
- 5. Instruct students to use one of their colored pencils to draw lines between living things that they observe today interacting with each other.
- 6. Instruct students to use the other colored pencil to draw lines between living things that they observe today interacting in some way with non-living things.
- 7. Instruct students to provide a key at the bottom of their science notebook page to show which color was used for which interactions.

#### wrap-up/formative assessment

- Ask students what they think the living things were doing when they were interacting with the living and the non-living things.
- Have students break into groups to discuss this, record their discussion ideas and conclusions on the science notebook page for the day, and present their conclusions to the class based on their science notebook entries and their "imagination."
- Check for understanding of living and non-living things.
- Check for understanding of organisms interacting with living and non-living things in the schoolyard ecosystem.

## activity 1.5: making connections

#### estimated time 20-30 minutes

#### objective

Students will be able to

1. Demonstrate how organism, population, community, and ecosystem are connected and how living things interact with other living things and non-living things in a pond ecosystem.

#### teacher preparation

This activity will work best in a clear, open area outdoors. *Pond Ecosystem Cards* templates are provided. One set requires one copy of the sun card and three copies of each of the other cards. Increase or decrease the number of plants/animals, as needed, to provide one card per student. To facilitate the activity, punch holes in the top of each card and attach and knot a piece of string long enough to slip easily over students' heads. Students should display the picture on their cards throughout the activity.

This activity serves as reinforcement of the basic ecosystem concepts as well as an assessment of student understanding of the concepts. Use as few prompts as possible. Encourage students to help each other.

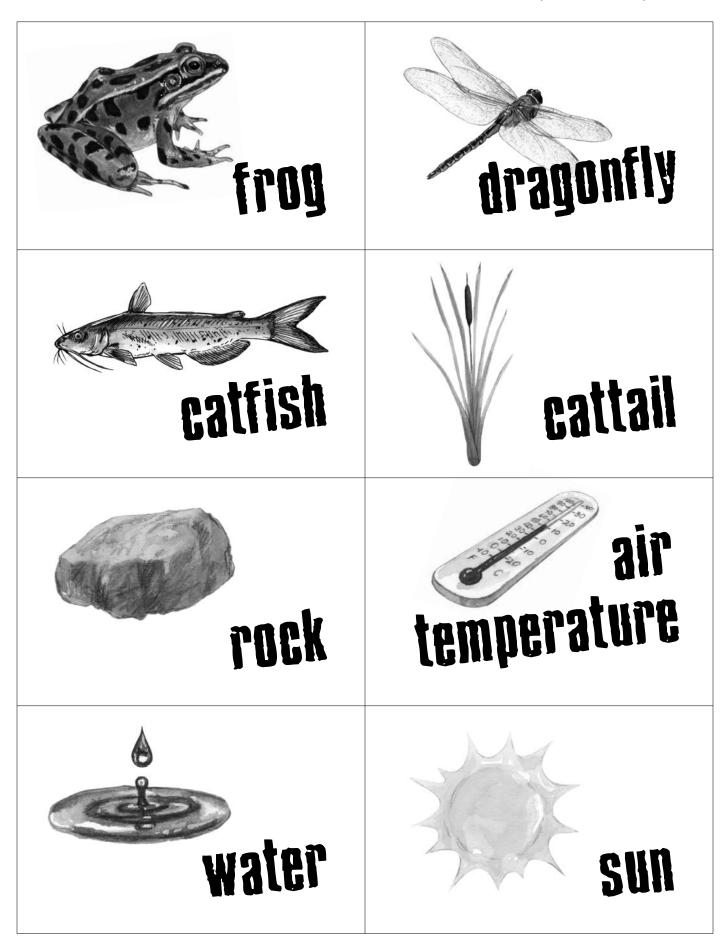
#### materials

Pond Ecosystem Cards (at least 3 of each except 1 sun)

#### procedure

- 1. Shuffle cards and distribute one card per student telling them that they will represent (pretend to be) the picture on their card. Have them display their cards clearly.
- 2. Instruct students with cards representing living things to move to your left side.
- 3. Instruct students with cards representing non-living things to move to your right side.
- 4. Address the students to your left (living things): If you are certain that you are a living thing and are an organism, organize yourselves into populations. If necessary, provide prompts and elicit the definition of a population. Living things should now be organized into four groups: a population of leopard frogs; a population of dragonflies; a population of catfish; and a population of cattails.
- 5. Continue to address the living things: If you are certain you are organized into populations, now organize yourselves into a community. Provide prompts and/or definitions, if necessary. Populations should now be intermingled.
- 6. Address the students representing the non-living things to your right: If you are certain you are a non-living thing, place yourself where you think you belong in the community we have here on my left.
  - Q. How do you all feel about your arrangement?
  - A. Answers will vary. If students take this as an opportunity to point out suggested shifts in the group, discuss these suggestions and shift accordingly.
    - *Example*: If this is a pond, maybe we should bring the students with water cards closer together.
    - Example: Shift the sun where he/she can "see," shine on," etc. all the living things.
  - Q. What did the addition of non-living things provide for the living things?
  - A. Rocks provided shelter. Water, air, light and temperature provided the basic needs for the cattails to survive. Water and air provided basic needs for the frogs, dragonflies and catfish to survive. Sun provided light.
  - Q. What do the living things provide for each other?
  - A. They provide shelter and food. Cattails provide shelter for the frogs, dragonflies and catfish. Frogs eat the dragonflies.
  - Q. Once everyone agrees on how the groups are organized and understand how and why they interact with each other: What do you represent as a whole?
  - A. An ecosystem. Provide prompts and/or definitions, if necessary.

**Wrap-up/formative assessment** See *Wrap-Up/Formative Assessments* in the Teacher Notes section of the introductory material to choose a strategy that meets student needs.



# so, what do you know?—lesson 1

bluegill

bluegill, dragonflies, cattails

1.	What 6 thi	ngs do plants need	to live?		
2.		ngs do animals nee	ed to live?		
3.	Read the li Air Cloud Deer	ist of things below Dragonfly Human Sun	and underline the non-livir Rock Water Cattail	ng things.	
4.	A single liv	ring thing is called	an		
5.	Α		is a group of t	he same organisms living toget	her.
6.	Why are no	on-living things imp	portant to living things?		
7.	Different _		of orga	nnisms living together form a co	ommunity.
8.	Organisms	are			that can grow and reproduce.
9.			nt populations of organisms	s interact with non-living things	in their environment an
10	). List one e	xample of a living	thing. Explain how you kno	w this thing is living.	
11	Place the	term by the picture	that best shows an examp	ole of what the term means.	
	a. Commu b. Ecosyst c. Organis d. Popular	em sm			bluegill, dragonflies, cattails.

bluegill

water, soil, etc.

### so, what do you know?—lesson 1

answer key

<u>Light</u> Space		Nutrie	nts	Water
		Temper	ature	Air
2. What 5 th	ings do animals ne	ed to live? (5 points)		
	Air	Foo	<u>d</u>	Shelter
	Water	Spac	<u>ce</u>	
8. Read the	list of things below	and underline the non-living thin	gs. (5 points)	
<u>Air</u>	Dragonfly	Rock		
Cloud	Human	<u>Water</u>		
Deer	<u>Sun</u>	Cattail		
A sinale li	vina thina is called	an <u>organism</u>	(1 point)	
. A	population	is a group of the san	ne organisms living toge	ther. (1 point)
. Why are n	on-living things im	portant to living things?Livin	g things need non-living	things to survive. (1 point)
Different	nonulat	tions of organisms	living together form a c	ommunity (1 naint)
. Dillerent	populai	or organisms	iiving together form a c	ommunity. (1 point)
. Organism	s areli	ving thi	ngs that can g	grow and reproduce. (1 point)
. When a co		nt populations of organisms intera is formed. (1 point)	act with non-living thing	s in their environment an
The a	nnswer should inclus s are organisms tha		lus an explanation.The e	s) explanation should indicate that living oles of living things. (Other explanations
1. Place the	term by the picture	e that best shows an example of v	what the term means. (4	4 points)
a. Comm b. Ecosys c. Organi d. Popula	tem sm			
				bluggill descention south
blue	aill l	bluegill, dragonflies, cattails	bluegill	bluegill, dragonflies, cattails, water, soil, etc.

d. Population

b. Ecosystem

a. Community

c. Organism